REMARKS

The Applicants request reconsideration of the rejection.

Claims 26-31 remain pending.

Claims 26-27, and 29-30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dobbins et al., U.S. 5,485,455 (Dobbins) in view of Jain et al., U.S. 6,311,218 (Jain). The Applicants traverse as follows.

Dobbins relates to an apparatus and method for establishing "virtual connections" through a packet-switched data communications network to realize service and control with a relatively low cost and high speed. In particular, the apparatus of Dobbins is configured so that a switch SFPS M10 retrieves a database (connection table) in connection with the transfer of a received packet (see Column 8, lines 6-10). At first, when no connection is defined between a source M11 and a destination M99 across a logical work group LAN, access switch S1 initiates a message exchange to the SFPS server 10. This message exchange is an independent exchange between the switch S1 and the server M10, and is not conducted between the switch S1 and the source M11.

The switch S1 sends a message asking whether M11 is permitted to communicate with destination M99. If the two stations are permitted to have a connection, the SFPS server

M10 determines the path of switches to be used to provide a logical connection between M11 and M99. A so-called "best path" is selected in accordance with cost, bandwidth, policy, loss, and other metrics. See Column 8, lines 37-52.

Once the switches constituting the "best path" have their connections defined, packets traverse M11 to M99 without any additional call-setup or network management interaction, according to the patent. At each switch, the switch looks up in the packet the source and destination MAC addresses and combines them with the inbound (source) port to form a connection identifier. If this connection is in the table of the switch, the packet is forwarded via the designated output port. All subsequent packets take the same path through the switches. See Column 9, lines 30-46.

Of note is that, when the destination is uncertain, the packet is sent to all ports except for the inbound port. See Column 8, lines 15-17. Thus, according to the configuration of Dobbins, it is impossible to determine the transfer destination based on the combination of an I/O port and a transmission source address. This contrasts with Claim 26, which transfers the received packet via an output (second) I/O port when it is determined that the combination of the first I/O port (input port) and the packet transmission source

address coincides with a combination of I/O port and

transmission source address that have been registered in

advance with a correspondence therebetween. Claim 29 has a

similar limitation.

Further, Claim 26 has a step of determining whether a

combination of the first I/O port and the packet transmission

source address coincides with a combination of an I/O port and

a transmission source address that have been registered in

advance with a correspondence therebetween. Against this

limitation the Office Action cites Column 8, lines 35-36 of

Dobbins. This passage of Dobbins, however, discloses that

switch S1 looks up in its connection table to determine

whether a valid connection between M11 and M99 exists. The

patent does not suggest that the connection table is used to

determine whether a combination of the inbound port A1 and the

source address of M11 coincides with a combination of an I/O

port and a transmission source address that have been

registered with a correspondence therebetween. Rather,

Dobbins looks to determine whether a valid connection between

a source and a destination exists.

Furthermore, the passsage of Column 9, lines 30-46

discussed above is asserted against the claimed step of

transferring the packet received at the first I/O port via the

second I/O port when it is determined that the combination of
the I/O port and the packet transmission source address
coincides with a combination of an I/O port and transmission
source address that have been registered in advance with a
correspondence therebetween. The passage, however, describes
the "best path" for already approved and programmed
connections between the source M11 and the destination M99,
and does not result from a determination as claimed.

In addition, Claim 26 requires a plurality of steps
limiting transfer of the received packet until receipt of a
user authentication, when the determining step results in a
determination that there is no coincidence between the claimed
combinations. Against these related steps, the Office Action
combines Dobbins's transfer of the received packet with the
authentication disclosed by Jain, because Dobbins is
acknowledged not to disclose a user authentication. Jain,
however, discloses that an authentication process 89 invoked
by a controller 82 causes a message to be sent to an
unauthenticated end system requesting an identification such
as a user ID and that the authentication is required each time
there is any interruption in the physical link with as end
system connected to a particular network port. To determine
whether authentication is required, Jain uses a mechanism at

the physical layer to determine whether the end system is newly connected to the port, rebooted or power cycled at the port. Specifically, the resumption of a linkbeat on the port, or an attempt to send data on the port that is authenticated, will be detected by controller 82 and cause the controller to initiate the authentication process. Jain neither discloses nor suggests any correspondence between an I/O port that has received a packet and the source network address identified in the packet, or that a packet relay means operates to learn about any such correspondence.

Therefore, because neither Dobbins nor Jain discloses or suggests to obtain user authentication in accordance with the detection of any such correspondence or lack thereof, it necessarily follows that the combination of Dobbins and Jain does not cause a received packet to be relayed upon authentication based on a correspondence between the I/O port and the source network address, or change the content of stored correspondence information based on such a user authentication.

For each of the foregoing reasons method Claim 26 (and apparatus Claim 29, which contains similar limitations) is patentably distinguishable from the combination of Dobbins and Jain.

By extension, dependent Claims 27 and 30 are also patentable.

Claims 28 and 31 were rejected 35 U.S.C. 103(a) as being unpatentable over Dobbins in view of Jain and Townsend et al., U.S. 5,661,719 (Townsend). In rejecting these claims, the Office Action asserts that Townsend teaches a transmission source address including IP and MAC addresses, citing Column 3, lines 13-24. This passage of the patent, however, describes the format of a typical data packet, including a MAC address section 302 containing a destination address and a source address, IP address section 304 containing a source address and a destination address and higher layer information 306 such as an e-mail or file transfer carried by transmission control protocol. Claims 28 and 31, however, require the transmission source address that is registered in correspondence with an I/O port to contain the IP address and MAC address, as contrasted with the packet transmission source address of the received packet, according to the claim. The received packet transmission source address of the claims is not limited by requiring it to include both the IP address and MAC address. Moreover, the combination of Dobbins, Jain, and Townsend neither discloses nor suggests that the pre-registered transmission source address, used for comparison in

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the determining step, include an IP address and a MAC address.

Accordingly, Claims 28 and 31 are separately patentable.

In view of the foregoing new claims and remarks, the

Applicants request reconsideration of the rejection and

allowance of the claims.

Respectfully submitted,
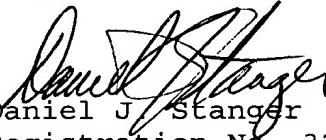
Daniel J. Stanger
Registration No. 32,846
Attorney for Applicants

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 Diagonal Road, Suite 370
Alexandria, Virginia 22314
Telephone: (703) 684-1120
Facsimile: (703) 684-1157
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